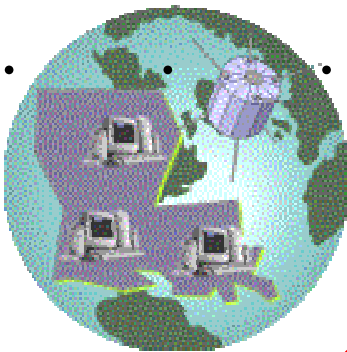


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Louisiana Technology Innovations Fund



2004 Annual Report

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Louisiana Technology Innovations Fund

Annual Report to the Legislature

Executive Summary

As of April, 2004 seventy-two projects have been received by the Technology Innovations Fund Council for consideration. To date, twenty-nine were selected for funding. They are as follows:

Log #	Project	Agency	Funding Approved	Amount Paid	Status as of 04/01/04
98-003	Point of Sale Hunting and Fishing	Wildlife and Fisheries	\$864,671	\$775,684	Complete
98-005	On-line Insurance Reporting	Public Safety	\$98,888	\$98,888	Complete
98-007	Distance Learning	Military	\$607,000	\$607,000	Complete
98-007c	Skycell Satellite	Military	\$544,000	\$544,000	Complete
98-009	Patient Biometrics	LSU Medical Center, NO	\$862,500	\$3,588	Terminated
98-010	High Performance Computing System	LSU, BR	\$989,383	\$962,297	Complete
98-016	Campus Walls	LSU, Eunice	\$176,422	\$176,422	Complete
98-017	Multi-media Internet	Wildlife and Fisheries	\$67,410	\$54,461	Complete
99-001	Internet-based Video Conferencing	LSU Medical, Shreveport	\$765,010	\$765,000	Complete
99-004	Louisiana Treasures	LSU, BR and UNO	\$198,078	\$184,974	Complete

Log #	Project	Agency	Funding Approved	Amount Paid	Status as of 04/01/04
99-005	Lab for Info Technology and Spatial Analysis	UNO	\$449,700	\$448,178	Complete
99-006	OCDD Telemedicine	Health and Hospitals	\$956,982	\$895,160	Complete
99-012	LA E-mall	Division of Administration	\$925,000	\$923,591	Complete
99-014	Web-based Data Warehouse	Education	\$1,000,000	\$991,000	Complete
99-015	X-Band Satellite Ground Station	LSU, BR	\$970,795	\$970,795	Complete
99-016	Training Today's Students for Tomorrow's Work Environment	LSU, BR	\$275,000	\$274,060	Complete
01-001	Mobile Data Terminals	Wildlife and Fisheries	\$1,000,000	\$955,882	In Process
01-002	Saving Lives and Enhancing Efficiency: Managing Medications and Medical Supplies	LSU, Shreveport	\$950,000	\$288,889	In Process
01-003	A Prototype Enterprise Application Hosting Service	LSU, BR	431,900	\$431,718	Complete
02-001	State Trooper Mobile Office	Public Safety	\$361,400	\$361,400	Complete
02-002	Fire Marshall Information Management System	State Fire Marshall	\$1,000,000	\$829,679	In Process
02-010	LouisianaMAP	E-Services	\$472,175	\$225,065	In Process
02-011	Louisiana e-Government Portal	E-Services	\$998,590	\$676,429	In Process

Log #	Project	Agency	Funding Approved	Amount Paid	Status as of 04/01/04
02-013	Statewide Learning Management System	CPTP	\$386,000	\$235,515	In Process
02-014	Prototype for Centralized E-Mail	OIT	\$949,200	\$658,625	In Process
03-003	Exploiting Linux Services in Louisiana	LSU	\$999,768	\$0	In Process
03-006	Development of Business Continuity and Disaster Recovery Plans	DEQ, DNR, DOTD	\$281,250	\$0	In Process
03-008	Internet-based Wireless Diagnostics and Predictive Modeling System	DOTD	\$291,350	\$0	In Process
03-013	Towards an Integrated Juvenile Justice Information System (IJJIS)	Louisiana Children's Cabinet	up to \$335,000	\$0	In Process

Budget Status

Fund Balance as of April 1, 2003			\$612,072
Increases in Revenue/Income			
	Interest Earnings	\$54,422	
	Act 14 of 2003 Regular Session	<u>\$992,294</u>	
Expenditures /Obligations			
	Expenditures	<u>\$(2,572,614)</u>	
	Obligations	<u>\$913,826</u>	
Fund Balance as of March 29, 2004			<u>\$0</u>

Accomplishments

- The Council membership during this time period was:
 - Chad McGee, CIO, Division of Administration
 - Dominic A. Cali, IT Director, Department of Transportation
 - Jerry Guillot, Chief of Staff, Senate Office
 - Bob Harper, Undersecretary, Department of Natural Resources
 - Butch Speer, Clerk of the House, House of Representatives
- During 2003
 - Three new projects were approved.
 - Two projects changed from a status of “In Process” to “Complete.” To date the total number of funded projects completed within or under budget is 17.
- The LTIF Web site, which is accessible on the Internet at <http://www.doa.louisiana.gov/ltif/index.htm> under *Info Louisiana* is being maintained to reflect the current status of the fund and recent activities. The site is updated regularly to reflect current progress status and progress reports for each project.

Project Summaries and Highlights

The LTIF was established to support innovative and exemplary projects that significantly contribute to the state's technology infrastructure and/or provide creative and concrete solutions for improving citizens' services.

A summary description and highlights for those projects that had activity during 2003 follows. For projects that were completed between 1999 and 2002, post-implementation updates are provided.



Division of Administration

LA E-Mall

Log #: 99-012

Status: Completed in 2002

The Office of Electronic Services contracted with IBM as the Internet E-Commerce Service Provider to provide turnkey services to allow state government to operate an electronic mall with varied storefronts operated and managed by individual Agencies. The e-Mall is accessible over the Internet through agency Web pages, the Louisiana Services Directory, and the *Info Louisiana* home page. The e-Mall makes the following services available to state agencies:

- Host Services and agency stores, including necessary E-Commerce hardware, software, and data communications.
- Tools to allow agencies to remotely configure and manage their individual stores.
- Consulting services support for Agencies in their implementations of storefronts to use custom forms and to interact with agency databases.
- Tools and support to facilitate Internet-based credit card processing and other electronic formats (i.e., e-checks) for interacting with the "State Bank" designated by the State's Treasurer's Office in accordance with state legislation and regulations.

Five agencies participated in the Initial Phase of this project that was focused on getting the e-Mall and agency storefronts operational. The initial agencies included Department of Transportation And Development, Louisiana Department of Insurance, Department of Economic Development, Louisiana Real Estate Commission, and Division of Administration's Office of State Register. Once underway, the Office of Motor Vehicles joined the project, adding four of their key online services. In addition, OMV added interactive voice response (IVR) as a channel for accessing services via the E-Mall.

Post Implementation Status:

- Use of the E-Mall has increased steadily since initial implementation in 2002. In 2003, the number of transactions handled for the same applications increased by 40% per month over 2002 with a total of more than 150,000 transaction for the year in 2003. In 2004, the monthly transaction volumes are 30% greater than for 2003.
- Since inception, the E-Mall has handled more than 250,000 transactions valued at \$11.25 million.
- In order to provide a more cost effective service, the E-Mall support services and legacy applications will be migrated from outsourced hosting to in-house hosting by July 1, 2004. This hosting change will provide a significantly more attractive transaction cost model. As a result, OES is currently working with six agencies to implement delivery of their services online using in-house hosted E-Mall support functions. All six agencies' online applications are scheduled to be operational by the end of 2004.
- Current projections estimate the E-Mall will support over 200,000 transactions in 2004, growing to more than 400,000 by 2006.

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Department of Education

Web-Based Data Warehouse System

Log #: 99-014

Status: Completed in 2003

This initiative implemented a Web-accessible data warehouse to improve student achievement and teacher quality by providing educational administrators, principals, and teachers access to the data they need for effective planning and decision making.

The system provides information from student, staff, financial, and standardized test score data to be accessible 24 hours a day, seven days a week through a desktop with a web browser to all authorized users. For example, data is provided on:

- 1) Student information for demographics, grades, courses, discipline records, mobility rates, standardized test results, special ed, etc.;
- 2) Staff for demographics, staff counts by school, courses and students taught;
- 3) Financial information for budget by facility, actual to planned expenditures, expenditures by program, function, and object codes.

Post Implementation Status:

- Fourteen different systems comprised of student, financial, testing, staff, and accountability data were loaded into the warehouse. The goal is to have five years' (or all years) worth of data for each system loaded. Currently all the systems except for two have been loaded.
- A portal at <http://www.leadr.info/> was deployed for the display of publicly available reports. Over 40 reports are currently available with a projected number exceeding 300. The system has received over 4500 hits since it went 'live' in September 2003. The LDE is in the process of acquiring a more productive and user-friendly front-end and report developer which is expected to substantially improve usage.
- Data is organized in a logical "business-like" format and easily accessible with a query tool. Data request turnaround using the warehouse has been cut by 75%. More data will become available to the public as customized and parameterized reports are published. Legislative staff and department personnel will have data immediately available during meetings and conferences. To this end the warehouse has fulfilled its mandates. The warehouse is the repository of record for the No Child Left Behind Act and many accountability reports are being developed using the data stored. Acquisition of the new front-end is expected to replace many of the existing static reports. Other federal initiatives (e.g., PBDMI) are being met using the warehouse as the sole source of information.

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LSU Baton Rouge

An X-Band Satellite Ground Station for the State of Louisiana

Log #: 99-015

Status: Completed in 2003

The new X-band environmental satellite telemetry system gives Louisiana the capability of receiving and processing advanced direct broadcast, high resolution earth environmental information. This real-time access and analysis lends itself to a major decision support role for emergency management, public safety, public health, economic applications, resource management and research/education. The SAR (Synthetic Aperture) provides advanced real-time, all-weather day/night satellite-derived environmental data for our state. The new X-band system can provide much more detailed measurements and maps of the earth, oceans and atmosphere on a time-series basis with higher spatial, spectral and radiometric resolutions. The new, higher resolution satellite data will provide time-series "birds eye" views of suspended sediments and phytoplankton blooms downstream of the largest Mississippi River diversions (Davis Pond and Caernarvon). These data could prove essential in the development of innovative management strategies for the diversions, maximizing benefits and minimizing negative impacts. The collected data will be linked via the Internet and managed as a non-profit data resource for Louisiana governmental entities and industry.

Louisiana is one of six states capable of receiving and processing advanced data streams to be used for continuous on-going surveillance, research, and environmental management. Besides the environmental management benefits, this investment gives Louisiana regional and national leadership in the use and applications development of space-borne environmental science technology. Furthermore, Louisiana's leadership with the X-Band Station is expected to have a positive impact on our economic development efforts as space-borne environmental sciences and applications of this technology both locally, nationally, and world-wide continue to grow.

Highlights:

▪ **Newly funded LSU Research Projects that use X-Band Facility**

- The Center for Coastal Zone Assessment and Remote Sensing, NASA Group 3 HBCU University Research Centers, (LSU Earth Scan Laboratory is university partner to Southern University-N. Walker P.I.), April 2003-April 2008, LSU budget \$960,000, total award, \$ 6,000,000, funded.
- New remote sensing methodologies for the surveillance of ocean features and improved understanding of circulation processes in the Gulf of Mexico, Minerals Management Service Coastal Marine Institute, (Walker, P.I.), September 2002-August 2005, \$346,383, \$198,864 match, funded.
- Assessment and remediation of public health impacts due to hurricanes and major flooding events, LA Board of Regents (Walker, Co-P.I.), April 2002-March 2007, \$3,686,000 funded.
- Rawinsonding of the atmospheric structure over the Baton Rouge area in the summer 2003, Louisiana Dept. of Environmental Quality, (S.A. Hsu, P.I.), \$49,719, funded.
- Simultaneous measurements of atmospheric visibility, particulate matter, and mixing heights at the Breton area IMPROVE site, Louisiana, Minerals Management Service (S.A. Hsu, P.I.), \$299,979, September 2003- September 2006, funded.

▪ **Graduate Student Awards**

- Evaristo Liwa, graduate student of Lawrence Rouse, Jr., is using MODIS data for wetland classification for his PhD research. He recently received the Knauss Fellowship and will be spending a year in Washington D.C. at the National Science Foundation, International program office.

▪ **Papers/reports published in 2003/2004 using X-band data**

- O.K. Huh and N. Walker, Remote sensing science and technology: the role of the Earth Scan Laboratory, *Gulf Coast Association of Geological Societies Transactions*, Vol. 53, October 23-24, 2003, Baton Rouge, LA, 2003.
- H.H. Roberts, J.M. Coleman, S.J. Bentley and N. Walker, An embryonic major delta lobe: a new generation of delta studies on the Atchafalaya-Wax Lake System, *Gulf Coast Association of Geological Societies Transactions*, Vol. 53, October 23-24, 2003, Baton Rouge, LA, 2003.
- Walker, Nan, Oscar Huh, Alaric Haag, Adele Babin, Jaye Cable, Gregg Snedden, DeWitt Braud, David Wilensky and Kota Prasad, A role for remote sensing in managing Mississippi River diversions, *Backscatter*, Association for Marine Remote Sensing, vol. 14, no. 1, 25-28, 2003.
- B. Blanchard and S.A. Hsu, Meteorology and air quality observe in Baton Rouge, Louisiana during the 2003 ozone season, Louisiana Dept of Environmental Quality Air Analysis Division, LADEQ CFMS Interagency Agreement NO. 594353, February 2004.

▪ **Conference abstracts and talks**

- Walker, N.D., R.R. Leben, S.P. Anderson, P. Coholan, Circulation and shelf-slope exchange processes associated with Loop Current cyclonic frontal eddies, EOS Transactions, OS31F-04 (**INVITED**), AGU Ocean Sciences Meeting, Portland, Oregon, 26-30 January 2004 (Talk and Abstract).
- Roberts, H.H., R.T. Beaubouef, N.D. Walker, G.W. Stone, S. Bentley, A. Sheremet and I. Van Heerden, (paper) Sand-rich bay head deltas in Atchafalaya Bay (Louisiana): Winnowing by cold front forcing, Coastal Sediments '03, 5th International Symposium on Coastal Engineering and Science of Coastal Sediment Processes, Clearwater Beach, Florida, May 18-23, 2003 (Talk).
- Huh, O.K, N. Walker, and N. Walker, 2003, Louisiana Office of Emergency Preparedness hosted International Workshop on Environmental Programs for Uzbekistan, May 20, 2003 (Talk).

▪ **New Collaborations using X-band data**

- The LSU Earth Scan Laboratory faculty and staff continue to collaborate closely with the Louisiana Office of Homeland Security and Emergency Preparedness providing data and interpretations to officials in times of hurricanes, tropical storms, fires, floods, etc.
- The LSU Earth Scan Laboratory faculty established collaborative research with NOAA NESDIS (Dr. William Pichel) to acquire and use Synthetic Aperture Radar (SAR) data in the Gulf of Mexico region. Applications are being developed to map flooding, to detect and track oil spills, ship wakes, river plumes, and high velocity currents.
- The LSU Earth Scan Laboratory is collaborating with Dr. Jack Malone, LSU Veterinary Medicine in attempts to apply MODIS data to the prediction of West Nile Virus in Louisiana.

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LSU Baton Rouge

Training Today's Student for Tomorrow's Internet Work Environment

Log #: 99-016

Status: Completed in 2002

This project, using the working title of “Robots for Internet Experiences (ROBIE)”, was initiated May 15, 2000 and successfully completed on June 30, 2002.

The project successfully showed that technology in the classroom available over the internet can be a highly cost effective mechanism for educating and inspiring students about science and technology. It also became clear during the project that technology in the classroom cannot be an end in of itself. Rather, that technology must be accompanied by development of lessons and materials that guide the use of the technology, assuring that these materials are aligned with existing curriculum and content standards, and teacher training in science / technology content as well as the use of the technology lessons and guide materials. The pilot workshop and classroom evaluations showed ROBIE strengths and areas where improvement would be useful. ROBIE will continue to be refined, using available resources.

Post Implementation Status:

Work has continued with this project, but at a slower pace consistent with available resources. A small radio telescope has been installed at the observatory as an enhancement to the original effort. The radio telescope can be used to look at astronomical objects with “invisible light” (i.e. radio waves). Particular sources that can be studied include the Sun, interstellar gas clouds, radio active stars, our galaxy as a whole and possibly Jupiter and Venus. A great advantage of the radio telescope is that radio observations can be done anytime day or night and clear weather is not necessary. Thus, it will be easier for classrooms to use the radio telescope during their normal daytime sessions. An internet interface has been developed for the radio telescope and is awaiting final testing and calibration before going operational.



The project team is in the process of installing remote telescopes at the LSMSA in Natchitoches, LA and at LIGO in Livingston, LA. Installation of the dome and telescope equipment should be completed by early summer and begin internet operation of this site by Fall, 2004.

There has also been progress on the internet control software for the optical telescope. The telescope internet control software will be simplified and image downloading speed will be significantly increased. Operation of the optical telescope reliably from remote locations should be feasible on the internet by Fall, 2004. In addition, progress has been made transmitting near-real time “video” images from the optical telescope over the internet. Using the hardware and

software established under this LTIF project, the project team was able to bring images of a lunar eclipse into the recently opened Irene W. Pennington Planetarium in downtown Baton Rouge. The images were updated every 15 seconds and downloaded to the planetarium over the internet providing a “live” experience of the eclipse.

The “internet robots” developed under this program continue to be of interest and useful to teachers and students. The number of field trips by school classrooms to the observatory has increased by about 25% over the last year. During these field trips, teachers and students are introduced to the optical telescope and HAM radio systems and demonstrations are provided. Several of the teachers in the pilot ROBIE workshop continue to use some of the associated lesson plans in their classrooms. Unfortunately, the project team has not been successful in obtaining the funding necessary to support expanded teacher training workshops. Over the last few years two proposals were submitted to NSF and one to LaSIP that would have included such training as part of the effort, but none of these were funded. Over the next several years, the team will continue the effort to expand this program.

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Department of Wildlife and Fisheries

Mobile Data Terminals

Log #: 01-001

Status: In Process, 99% Complete

This project will implement a base foundation network to support Mobile Data Terminals (MDT's) for approximately 60 officers/vehicles in the Law Enforcement Division of the Department of Wildlife and Fisheries. MDT's provide agents with a direct link to frequently used sources: the National Crime Information Center, nationwide drivers license files, other natural resource protection agencies, state and local agencies, Fisheries Information Network, the Department of Wildlife and Fisheries Intranet, hunting, fishing, fishery landings, etc.

The immediate availability of relevant, crucial information will improve and increase the current delivery of services to Louisiana citizens and extend services to typically underserved citizens, those that live and work in more rural areas on hard to reach waterways. In addition to online compliance and enforcement functions, the laptop computer serves as an offline computer for report writing, time and attendance reports and crucial statistical information, all of which is captured and compiled in a database used to gauge performance relating to WLF's goals and objectives.

Highlights

- The dedicated T-1 interface with the Department of Public Safety has been secured, all equipment and software components have been received, tested, and accepted.
- Completed user training.
- Moved system to operational status.

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LSU Health Science Center, Shreveport –

Managing Medications and Medical Supplies

Log #: 01-002

Status: In Process, 55% Complete

The goals of this project are to 1) save patient lives and improve patient care through reduction of medication errors; 2) create sustainable and measurable cost savings by ensuring that all medications and supplies are appropriately tracked and charged to the patient and by reducing the cost of managing the procurement and distribution of medications and supplies; 3) enhance billing efficiency by interfacing to systems that are currently stand-alone; 4) reduce or re-allocate workforce by reducing manual data entry and manual tracking of medications and supplies.

This project uses wireless Ethernet Personal Digital Assistants (PDAs) with barcode scanning capability, a concept prevalent in the retail industry, but a relatively new idea in healthcare. Medications and supplies will be barcoded to enable tracking. A nurse, using a PDA, will scan a patient's barcoded wristband, scan the medication, and scan her ID badge before administering a drug. If the system confirms that the medication being administered is to the right patient at the right dose and at the right time, then the PDA will confirm. The patient's account will then be appropriately charged, the inventory system will be appropriately decremented, and if needed, an electronic order will be placed to the pharmaceutical wholesale company. A similar process will occur when surgical supplies are expended in the operating room.

Highlights

- The implementation of wireless Ethernet throughout the campus has been completed, including enhancements for wireless security.
- The implementation of the Pharmacy system has been completed, and physicians now have access through a web interface to all medications prescribed to patients in the hospital.
- By mid-2004, the first wireless barcode systems will be in use in the psychiatric ward of the hospital, and progress will be reviewed by JCAHO.

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Louisiana State University

A Prototype Enterprise Application Hosting Service

Log #: 01-003

Status: Completed in 2003

The Enterprise Application Hosting Service is intended to provide researchers, educators, and students across the state of Louisiana with access to critical, state-of-the-art knowledge and experience in e-business and e-government technologies. Through this service, researchers, educators and students will be able to 1) learn about existing technologies and integrated business practices (e.g., e-Business and e-Government), 2) study and experiment with new and innovative approaches to technology solutions and integrated business practices, 3) gain hands-on experience and skills on new technologies and business systems, and 4) leverage the “community” to realize new synergies to help distinguish Louisiana in e-business and e-government education. These goals have been realized, and will continue to be realized, through the SAP UCC Program established between SAP AG and LSU’s E.J. Ourso College of Business Administration.

Highlights:

- The Hosting Services operation is currently self-supporting and requires a relatively low level of resources and capital. It provides access to a full suite of ERP and e-Business application for educational purposes serving thirteen Universities across the nation.
- The hosting center operation supports educational workshops that bring faculty together from across the state, and across North America. The hosting center operation provides support for research and educational initiatives at Louisiana State University.
- The Hosting Service is one of five such operations in the U.S.A. that are supported by SAP America of Newtown Square, Pennsylvania, a leading provider of enterprise applications in the world.
- Major donation of Enterprise Application Software is valued at \$5,000,000 from SAP America to the hosting services operation.
- Major donation of HP Intel-based application servers is valued at \$110,000 from SAP America to the hosting services operations.

A partial list of recently published articles:

Noguera and **Watson, E. F.** (2003) "Reengineering Business/IS Education with ERP Systems: An Empirical Evaluation of its Effectiveness", to appear in *Logistics Information Management Journal*.

Watson, E.F., Yoho M., and Riede, B. (2003) "Role of Next Generation Enterprise Applications in Intelligent Enterprises" to appear in *Intelligent Enterprises of the 21st Century*, (eds: Gupta, J. and Sharma, S.), Idea Group Publishing, Hershey, Pennsylvania, USA.

Yao, Y. and **Watson, E.** (2003) "Concerns and Solutions about Adoption of Electronic Voting Systems", In *Managing IT in Government, Business & Communities*, edited by Gerry Gingrich, Hershey, PA: IRM Press, Forthcoming.

- *Research Accomplishment:*
 - In 2003, LSU graduated a new doctorate, Les Singletary. Dr. Singletary's area of research was in application integration. This work benefited from his hands-on experience working with the enterprise systems operations at LSU.
 - In 2004, LSU expects to graduate a new doctorate, Chrisy Yurong Yao. Ms. Yao's research area is in enterprise application hosting. This research was inspired by, and is supported by the hosting services operation at LSU.
 - Currently, two other PhD students at LSU are working in the area of enterprise information systems adoption in organizations, and have a specific interest in the impact that such systems have on organizations, power structures, and relationships.
- *Education Accomplishment:*
 - LSU continues to support an enterprise systems curriculum at the B.S., M.S., and MBA levels. The LSU hosting services operations makes this affordable, practical, and effective.
 - Southern University is currently developing a new e-Business curriculum based on the resources available through the LSU hosting services operations. The LSU hosting services operations makes this affordable, practical, and effective.
 - Louisiana Tech University has also just recently joined the SAP University Alliance program and is enhancing their existing curriculum. The LSU hosting services operations makes this affordable, practical, and effective.
- The LSU-Ourso College has established a global UCC network with Universities around the world, including:
 - University of Missouri, College of Business
 - University of Wisconsin, Milwaukee, College of Business
 - California State University, Chico
 - University of Passau (Germany)
 - University of Magdeburg (Germany)
 - Queensland University of Technology (Australia)
 - HES Amsterdam School of Business (Netherlands)
 - Aoyama Gakuin University, School of Business Administration (Japan)

Collectively, these Universities work collaboratively with the Ourso College and SAP to further advance our knowledge of enterprise computing. This network will be leveraged in many ways to facilitate research and education initiatives and to further help to bring international exposure to the academic achievements of scholars in Louisiana's universities.

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Public Safety

State Trooper Mobile Office

Log #: 02-001

Status: Completed in 2003

Project to equip 650 Louisiana State Police officers with software, printers, and magnetic swipe devices to create an “office environment” within their vehicles. The increase in trooper patrol time will have a net effect similar to adding troopers to the staff.

Highlights

- The magnetic card stripe readers are enhancing the accuracy of Accident Reports written by the Troopers as well as enhancing officer safety.
- The Microsoft suite that has been put on the officers’ laptops have increased the Troopers’ time usage efficiency and decreased the need for the Troopers to go into the offices, thus allowing them to spend more time on the road protecting the public.
- The printers in the vehicles have given the Troopers the ability of printing out their reports locally as opposed to printing them remotely at the Troop then driving there to retrieve them.
- Trooper safety has been increased, along with the enhancement of accuracy in identifying drivers and report writing. Troopers are now able to utilize the Microsoft suite program to write and locally store records and reports of their daily routine.

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State Fire Marshall

Fire Marshall Information Management System

Log #: 02-002

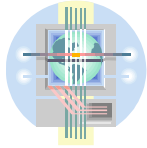
Status: In process; 42% Complete

The project is being implemented to provide the ability for the Louisiana Architectural, Engineering, and Construction community (“AEC”) as well as the general public to submit and review plans through a web based portal; to provide the State Fire Marshall the ability to perform construction inspections while in possession of the most current information on that specific project; the capability to provide the citizens and businesses of the State of Louisiana electronic communication with the State Fire Marshal’s Office via the web; the means of producing quicker and more cost effective correspondence with the AEC and Louisiana citizens; and the implementation of a program that can potentially be interconnected with other state agencies and local municipalities around the country.

Highlights

- All computer hardware and software have been received, installed, and accepted.
- The project is slightly behind schedule, attributable to computer coding for cross department infrastructure and extra time spent on database development. Additional coding time is expected to save time towards the middle and end of the project.

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Office of E-Services

LouisianaMAP

Log #: 02-010

Status: In process; 95% Complete

The Louisiana Geographic Information Systems Council in partnership with the Office of Electronic Services will address the State's geographic process issues so that all sectors of Louisiana government, businesses and citizens can effectively and efficiently utilize geographic information and services to enhance their business processes. The strategy is to address the geographic process from an *enterprise* perspective through three complementary, integrated initiatives:

- a comprehensive state plan for production, acquisition, and management of key geographic framework information
- a web-based geospatial portal
- training for the use of the data and geographic services provided through the portal

Highlights

- State I-Team Coordinator selected. This has become a permanent position that is staffed by the GIS Council.
- I-Team workgroups are all established and functional. The following URL <http://lagic.lsu.edu/I-team/groups.asp> provides an organizational structure for the I-Team and shows the participants of each working group.
- "As-Is" status of Louisiana Framework Layers have been collected by the respective working groups and incorporated in the I-Team Plan.
- Interim I-Team requirements collection tools have been installed. An overview of the requirements process is presented at URL <http://lagic.lsu.edu/I-Teams/Presentations/2002/ITEAM-PRES-REQUIREMENTS-20020516-00.ppt>
- First and second Annual Governor's reports were submitted in October 2002 and September 2003 respectively.
- I-Team plan was completed and released with Report to the Governor in September 2003. A copy of the plan can be accessed at [Louisiana I-Team Plan \(v1.0\)](#)
- Functional description for LouisianaMAP portal developed; Technical architecture for LouisianaMAP developed; Portal prototyping conducted at LAGIC
- Web services available through the Portal and for Imagery integration have been developed.
- The LouisianaMAP Portal hosting strategy was revised back to that proposed in the original TIF proposal; hosted on state operated equipment at a state facility. Hardware and software

procurement consistent with this strategy was completed in September and October 2003 and the facility was activated at Office of Computing Services in October 2003.

- LouisianaMAP Geospatial Portal was launched in November 2003. It can be viewed at www.louisianamap.gov
- LouisianaMAP is operationally supporting from 700 to 1,000 user sessions per workday.

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Office of E-Services

e-Government Portal

Log #: 02-010

Status: In Process, 95% Complete

This project will establish an e-Government web portal so that anyone can access State government in various contexts such as:

- a life event (moving to Louisiana, starting a new job, marriage, death...)
- an intention-based scenario (“how do I renew my driver’s license?”)
- a member of a community of interest (citizen, state employee, business, non-resident)
- or based on personal preferences (customized view of pre-selected web pages of interest as part of a user profile)

Key existing web assets in state government will be integrated so that information and services responses will be presented in a seamless fashion and without the need to know or understand the State government organizational structure.

Highlights

- The Content Management system was established as a product standard in June, 2002 and implemented in September 2003. This element of the portal project is fully available at this time and is supporting the Portal development.
- The Citizen Relationship Management software, Ask Louise, was launched operationally in July 2003. This element of the portal project is fully operational.
- The Enterprise Search capability has been established as a line of service. Enterprise search has been tuned to support the increased demand of the Portal and is fully available at this time. Several agencies are currently utilizing the Search line of service.
- The IBM Websphere product family was selected via bid in May 2003 as the state standard for Application Platform Suite (APS) and the components of that product line for the Portal were acquired when the contract became effective in June 2003.

- A Memorandum of Understanding was executed with Louisiana Technology Park to provide the hardware hosting required for the portal. Hardware is in place and available to support the development activities of the Web Developer to be selected through the CSSA process.
- The IBM Websphere software necessary to host the development, test and production environments for the Portal was acquired in July 2003. The Portal developer installed the Websphere software at Technology Park and at Division of Administration.
- OES is working with Louisiana Department of Economic Development and the Governor's Office to incorporate the Choose Louisiana initiative as a key theme for the Louisiana.Gov Portal.
- A comprehensive Payment Gateway Portal component was acquired and may be utilized as a portal web service by any state agency to collect funds or make payments using a variety of electronic payment methods supported by the State Treasurer.
- The detail design and initial implementation of the State Portal was completed in September, 2003. In October and November 2003 the portal was integrated with other state web resources and subjected to extensive testing. The Portal was brought online in November 2003. The official roll-out of the portal occurred, in concert with a press release, on December 2, 2003.
- The Louisiana.gov Portal was updated to reflect the administration changes effective January 12, 2004.
- Work on the infrastructure for participating agency web sites began in October, 2003. This infrastructure has been completed and a prototype of one agency has been demonstrated. The remaining web sites will be completed in April 2004.
- eCommerce integration began in September 2003. This will also be completed in April 2004. The Payment Gateway implementation and portal hosting for agencies using the eLicense regulatory licensing system have been completed. Migration of the remaining Louisiana E-Mall storefronts to Technology Park will be accomplished in April, 2004.

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Comprehensive Public Training Program (CPTP)

Statewide Learning Management System

Log #: 02-013

Status: In process; 95% complete

This project is to acquire and implement a centralized statewide Learning Management System (LMS) that will consolidate existing but separate State employee training databases into one repository for all state employee training data. This will create the foundation for an e-learning environment that will allow CPTP to plan, deliver, track, manage and report all types of employee training, offer a full range of content via custom web-based courses and commercially available courses, and create web-based tests and assessments.

Highlights

- Phase 1 - The LMS software was installed on the test and production servers. The data from the Registrar database was converted to the LMS SQL database. The interface with the Civil Service database was completed, with data being updated on a weekly basis. The student Web interface was designed and implemented.
- Phase 2 – LMS access was established for department training administrators to include all functions except create rights. Security profiles were created, and partitioning was defined to keep one department's records separate from another's. Training was conducted for selected department training administrators (DEQ and DOTD). CPTP administration is using the LMS, as is DEQ. System is ready for statewide use.

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Office of Information Technology

Prototype for Centralized E-Mail

Log #: 02-014

Status: In Process; 61% Complete

Historically, individual state agencies have been responsible for providing their own e-mail service, which entails significant hardware, software, personnel and training expenses (or outsourcing), results in service quality that varies drastically between departments, and provides no integration of e-mail or calendaring between state departments. This project seeds the implementation of a statewide e-mail line of service based on a cost recovery model. It entails one centrally managed standard e-mail offering to replace the three primary e-mail software packages currently deployed statewide, and provides one common e-mail directory and calendaring tool that can be shared by all State employees while at work or via the Web. Agency subscribers are charged a set price-per-seat that is lower than the costs associated with managing their individual, distributed sites statewide, and quality of service will improve.

Other key benefits anticipated are: 1) to implement an IT line of service that can provide immediate benefit to core business function that encompasses a large base of the state's workforce; 2) to develop a statewide deployment plan that can be used for this and other enterprise services to be offered in the future; 3) to build the technical and support framework through which other desktop lines of service can be offered.

Highlights:

- The statewide email project now supports 4,200 state employees in the following agencies for messaging functions:
 - o Division of Administration
 - o Department of Economic Development
 - o Governor's Office
 - o University of Louisiana Systems
 - o Department of Education,
 - o Civil Service
 - o Department of Natural Resources
 - o Department of Environmental Quality
 - o Public Service Commission.
- Consolidated email for Department of Environmental Quality and the Public Service Commission.
- Moved email data off IBM SAN onto Dell EMC SAN.
- Replicated email data to additional SAN to be used for offsite storage.
- Monitoring email servers using HP Openview monitoring software.
- Moved email system to OTM's Data Dial Tone network.

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Louisiana State University

Exploiting Linux Services in Louisiana

Log #: 03-003

Status: In Process

LSU proposes to develop a robust, scalable environment to accelerate and facilitate the evaluation and deployment of Linux services and applications within public-supported entities in Louisiana. Linux combined with virtualization technology offers a possible opportunity to combat the growing cost of supporting burgeoning, complex information technology infrastructures and the increasing dependence on a proprietary software platform. The intent is to maximize the opportunity to accelerate innovation with Linux, to limit dependence on proprietary systems and to focus on total cost of ownership issues.

The initial goal is to create a production Linux server test bed to:

- provide an established environment for State agencies to evaluate potential Linux system software and applications.
- provide a pilot line of service to implement common Linux-based functions including web serving, file and print serving, listserv support, virtual computers for classroom instruction, distributed data base serving, e-mail, server and workload consolidation, etc.
- provide a pilot line of service to offer State agencies additional computing resource on a temporary basis and failover services as required for existing services.

Highlights:

- Equipment was bid, awarded, delivered and installed. The current z/Linux environment went into production and moved off the LSU 2066-002 mainframe in January, 2004.
- Completed the hardware installation at the LSU computer center. A tape robot expansion was installed at the ISB data center to handle backup capability.
- Installed the 31-bit SuSE Linux distribution for the s390 architecture. Awaiting completion of the image infrastructure before installing the 64-bit distribution. The team expects both versions can coexist in the 64-bit z/VM underlying platform.
- Implemented cloning procedures to create new Linux images based on the SuSE templates and migrating existing Red Hat images to them. All new images are being created on the new SHARK disks. Setting up a web site for this project to promote dialogue with users, "<http://zlinux.lsu.edu>".
- Installed the ESALPS z/VM-z/Linux monitoring system.
- Tentatively scheduled a workshop for Spring, 2004, to discuss the technical infrastructure of the project and solicit feedback and suggestions from the State technical community before solidifying some of the standard Linux services to be offered, such as web servers, database servers, file/print servers, etc.

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**Department of Natural Resources,
Department of Transportation and Development,
Department of Environmental Quality**

**Development of Business Continuity and Disaster
Recovery Plans**

Log #: 03-006

Status: In Process

Continuity of critical government services in the event of a disaster or crisis is of paramount importance to the State of Louisiana. Three key Louisiana State agencies are participating in this project that will demonstrate the viability and feasibility of using sophisticated mitigation software to develop disaster recovery plans that meet the needs of the individual agency, yet integrate at the Statewide level. Disaster recovery plans define the resources determined critical for recover, how fast, by whom, and where a recovery will take place to re-establish critical business infrastructure. The business continuity plan includes procedures to return to normal business conditions. Experience gained in this prototype will be portable and transferable to other agencies that also need to develop business continuity plans and disaster recovery plans.

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Department of Transportation and Development

**Internet-based Wireless Diagnostics and Predictive
Modeling System**

Log #: 03-008

Status: In Process

A primary DOTD function is to ensure the operational health of its mission critical vehicle and equipment assets, which account for nearly 25% of the State's total vehicle fleet. Inadequate maintenance is the primary cause of premature wear and unscheduled downtime, both of which result in significant costs. The proposed system utilizes patent-pending technology to wirelessly flow in-vehicle diagnostics to a centralized fleet management system, designed to monitor onboard parameters and diagnostics. If necessary, the fleet system responds to incoming vehicle data by appropriately notifying operators, maintenance and management personnel, and relevant vendors via the Internet and field-based hardware devices. All data is stored in a central data warehouse for interrogation and predictive modeling.

The following performance goals will be monitored and evaluated:

- **Average Expected Maintenance Performed versus Average Actual Maintenance Performed** – DOTD will monitor equipment not utilizing the proposed technology versus identical equipment utilizing the technology to determine the number of actual maintenance

services (cycles) performed against the number of expected cycles over a particular odometer/meter/date range.

- **Preventative Maintenance Activities as a Percentage of Total Work** – DOTD will monitor the ratio of preventive maintenance (PM) work to emergency repair work orders. It is expected that the proposed technology will increase PM activities as a percentage of maintenance work.
- **Monitor Data Gathering and Data Entry Time for Vehicle Parameters** – As stated above, DOTD will monitor equipment with and without use of the proposed technology and compare the amount of time and money associated with manually versus electronically gathering and updating equipment operating data (i.e., engine hours, vehicle mileage, maintenance details).
- **Evaluate DOTD Employees Before and After Technology Implementation** – DOTD will survey employees before and after technology implementation to determine average daily time spent gathering vehicle data, interacting with current versus new fleet system, monitoring and scheduling maintenance requirements in current versus new fleet system, and processing completed service requirements in current versus new fleet system.
- **Derive Cost of Ownership and Asset Utilization** – DOTD will monitor equipment with use of proposed technology to derive cost of ownership and asset utilization information. Equipment items with the technology will be evaluated as to their level of utilization. These statistics are monitored as standard functionality within the proposed technology.

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Office of the Governor / Children's Cabinet

Towards an Integrated Juvenile Justice Information System

Log #: 03-013

Status: In Process

The Children's Cabinet, in partnership with the Louisiana Commission on Law Enforcement (LCLE), the Office of Youth Development, Department of Public Safety and Corrections, the Supreme Court, and various district courts, will implement an integrated, web-based Juvenile Offender Information Network (JOIN) system based on national standards to enable data sharing among statewide and local juvenile justice agencies involved with juvenile delinquency, traffic, formal FINS, probation, detention, and corrections.

The integrated Juvenile Offender Information Network (JOIN) system will be installed and tailored to meet the needs of at least two pilot sites within 21 months of the date of grant award. Thereafter, it will be a goal to install and tailor the system to meet the needs of at least three additional pilot sites per year or a minimum total of fifteen sites in five years.

Each pilot site will begin reporting data as required by the Children's Cabinet, the Louisiana Commission on Law Enforcement, the Legislature, and perhaps other entities within one year after the installation of each system.

The JOIN system will be merged and integrated with the stand-alone systems being developed by the Supreme Court and potentially other users into the Integrated Juvenile Justice Information System (IJJIS) within two years of the completion of this grant and the first year of installation of the offender system within the pilot sites.

Highlights:

The proposal calls for a two-year project requiring a total grant of \$339,000. At the time of the award in October of 2003, the TIF Board granted the project \$335,000, of which only \$68,000 was available in actual cash. Since that time, the project has accrued approximately \$88,000, an amount still not sufficient to meet the funding requirements of the project's first year or to properly initiate the project. For this reason, the initiation of the formal project has been indefinitely postponed, pending the accumulation of funding sufficient to meet the requirements of the first year of the grant, i.e., the securing of a technical project manager and a software development company.

An organizational meeting of the planning team and the user groups was held in late December, 2003 and voluntary planning has continued to take place, even though no grant monies have been drawn down or expended. More recently, the Judicial Administrator's Office of the Supreme Court has applied to the Louisiana Commission on Law Enforcement (LCLE) for a JAIBG grant of \$65,000 to supplement the project and to enable its formal initiation. If the JAIBG grant is awarded in April, 2004, the project may then have sufficient funds to hire a technical project manager, to complete and issue the request for proposals and the functional requirements of the projects, and to select a software developer. If the JAIBG grant is secured in April, the Children's Cabinet will formally request that a revised MOU be executed, rolling back the project's start-date to May 1, 2004 and authorizing the use of TIF funds as match to the LCLE grant in the first year. Unless further TIF monies become available in the second year, the project will not be able to purchase hardware and install the hardware and new software system in the pilot sites and the central site proposed in the TIF application. If all TIF monies become available in the second year, the project will be able, because of the LCLE grant, to expand the number of pilot sites to three instead of two.

Project Progress Reports

The LTIF guidelines stipulate that each award recipient provide progress reports indicating the status of the project, accomplishments by milestone, and expenditure of funds. The latest progress reports for each of the funded projects can be found at www.doa.louisiana.gov/ltif/ltifprop.htm